AMENDMENTS TO THE CLAIMS:

Claims 1-8 (Canceled)

9. (Currently amended) An optical communication system comprising:

a first optical fiber connected to a first station which transmits an optical signal for a plurality of channels;

a second optical fiber connected to a second station;

a third optical fiber connected to a third station; and

a light branching apparatus, which comprises:

an optical splitter which splits said ~~an~~ optical signal ~~for a plurality of channels on said first optical fiber from said first station~~ into at least a first optical channel signal on a first channel of said second optical fiber and a plurality of second optical channel signals on a plurality of second channels of said third optical fiber; and

a first wavelength dispersion compensator formed on said second optical fiber, which is provided for said first channel and compensates wavelength dispersion of said first optical channel signal due to said optical splitter.

10. (Original) The optical communication system according to claim 9, further comprising:

a second wavelength dispersion compensator which is provided for said plurality of second channels and compensates wavelength dispersion of said plurality of second optical channel signals due to said optical splitter.

11. (Original) The optical communication system according to claim 10, wherein said first wavelength dispersion compensator compensates wavelength dispersion of said first optical channel signal due to said second optical fiber, in addition to said wavelength dispersion of said first optical channel signal due to said optical splitter.

12. (Original) The optical communication system according to claim 11, wherein said first

wavelength dispersion compensator compensates said wavelength dispersion of said first optical channel signal due to said second optical fiber by difference in length between said second optical fiber and said third optical fiber on which said first optical channel signal is selectively propagated.

13. (Original) The optical communication system according to claim 12, further comprising:

an optical switch which switches a channel from one of said plurality of second channels to said first channel.

14. (Previously presented) The optical communication system according to claim 9, further comprising:

another wavelength dispersion compensator which is provided for said first channel and compensates wavelength dispersion of said first optical channel signal due to said second optical fiber.

15. (Previously presented) The optical communication system according to claim 9, further comprising:

another wavelength dispersion compensator which is provided for a third channel of said second optical fiber and compensates wavelength dispersion of a third optical channel signal inputted to said light branching apparatus due to said second optical fiber.

16. (Original) The optical communication system according to claim 9, wherein said plurality of optical channel signals are compensated in units of channels, and said first wavelength dispersion compensator includes at least a first wavelength dispersion compensating element for the channel of said first optical channel signal.

Claims 17-19 (Canceled)

20. (New) An optical communication system comprising:

a light transmitter station;

a first light receiver station in communication with said light transmitter station via an optical transmission line comprising a plurality of optical fibers;

a light branching apparatus formed on said optical transmission line between said light transmitter station and said first light receiver station; and

a second light receiver station in communication with said light transmitter station via said optical transmission line;

wherein a path between said light transmitter station and said first light receiver station comprises a main transmission path, and a path between said light branching apparatus and said second light receiving station comprises a sub-transmission path, and

wherein said light branching apparatus comprises a first wavelength dispersion compensator for said main transmission path, and a second wavelength dispersion compensator for said sub-transmission path.

21. (New) The optical communication system of claim 20, wherein said light transmitter station transmits a plurality of optical signals to said light branching apparatus,

wherein said light branching apparatus further comprises an optical splitter which splits said plurality of optical signals into a first optical channel signal in said main transmission path and a second optical channel signal in said sub-transmission path, and

wherein said first wavelength dispersion compensator compensates wavelength dispersion of said first optical channel signal due to said optical splitter.

22. (New) The optical communication system of claim 20, further comprising:

a plurality of optical repeaters formed on said optical transmission line between said light transmitter station and said light branching apparatus.

23. (New) The optical communication system of claim 22, wherein an optical repeater in said plurality of optical repeaters comprises an optical amplifier.

24. (New) The optical communication system of claim 22, further comprising:

a plurality of dispersion shift fibers formed in said optical transmission line; and

a plurality of dispersion compensate fibers having a characteristic opposite to a characteristic of said dispersion shift fibers and formed between adjacent optical repeaters in said plurality of optical repeaters.

25. (New) The optical communication system of claim 22, wherein said first wavelength dispersion compensator comprises a first plurality of dispersion compensator circuits, and said second dispersion compensator comprises a second plurality of dispersion compensator circuits.

26. (New) The optical communication system of claim 25, wherein said first and second pluralities of dispersion compensator circuits comprise corresponding branch paths which are separated for all wavelength ranges of an optical fiber in said optical transmission line.

27. (New) The optical communication system of claim 25, wherein said first and second pluralities of dispersion compensator circuits compensate for a wavelength dispersion at once on all of said wavelength ranges.

28. (New) The optical communication system of claim 25, wherein said first and second pluralities of dispersion compensator circuits are selected to have a compensation characteristic determined in accordance with a dispersion amount determined based on a property of said light branching apparatus using an optical signal of a predetermined wavelength as a reference.

29. (New) The optical communication system of claim 24, wherein a wavelength dispersion in said optical transmission line is compensated by said plurality of dispersion compensate fibers and said first and second dispersion compensators, such that wavelength dispersion compensation is carried out in intervals in said optical transmission line.

30. (New) The optical communication system of claim 29, wherein a wavelength

dispersion in said optical transmission line is sequentially compensated, such that said wavelength dispersion compensation is carried out uniformly to all of said wavelength ranges.

31. (New) An optical communication system comprising:

a first station transmitting an plurality of optical signals having different wavelengths, respectively;

second and third stations in communication with said first station; and

a light branching apparatus comprising an optical splitter/combiner which receives said plurality of optical signals from said first station, and branches said plurality of optical signals such that one of said plurality of optical signals is branched to said second station and a remainder of said plurality of optical signals is branched to said third station,

wherein said second station transmits an optical signal having a same wavelength as said one of said plurality of optical signals, to said light branching apparatus,

wherein said optical splitter/combiner combines said optical signal from said second station with said remainder of said plurality of optical signals to form a combined optical signal, and forwards said combined optical signal to said third station, and

wherein said light branching apparatus comprises a first wavelength dispersion compensator for said one of said plurality of optical signals branched to said second station, and a second wavelength dispersion compensator for said optical signal from said second station.

32. (New) A light branching apparatus for an optical communication system, said apparatus comprising:

a plurality of optical splitter/combiners which receives a plurality of optical signals from a first station, and branches said plurality of optical signals such that a first portion of said plurality of optical signals is branched to a second station and a second portion of said plurality of optical signals is branched to a third station;

an optical switch which switches a transmission path between a first transmission path between said first station and said second station, and a second transmission path between said first station and said third station; and

first and second wavelength dispersion compensators which are formed in said second transmission path and compensate for a wavelength dispersion due to a change of transmission path length when said transmission path is switched by said optical switch between said first and second transmission paths.